

Montana Trauma System Performance Improvement Where do we go from here?

Regional Trauma Performance Improvement



Regional Performance Improvement

- Objectives:
 - Improve patient outcomes
 - Feedback to providers, facilities, EMS, RTACs and the STCC
 - Identify performance improvement projects
 - Identify education opportunities
 - Maintain confidentiality
 - **NOT PUNITIVE!!!!**

Trauma Registry

- Effective use of statewide trauma registry
 - Moving the web based platform
- All trauma designated and non-designated facilities should be participating
- Utilize statewide inclusion criteria for the trauma patient inclusion in the registry
- Create a trauma data dictionary & provide user education
 - GOOD DATA IN = GOOD DATA OUT

Performance Improvement Indicators

- All deaths from the TRF and CTH trauma centers
 - Could include ATH and RTC
- Patients with an ISS ≥ 15 , and:
 - Trauma Code NOT activated when appropriate
 - Transfer times > 2 hours
 - GCS ≤ 8 and NOT intubated
 - Hemo/pneumo diagnosed and chest tube NOT placed
 - Transfers directly out of state

Identify Cases to Review

- State Trauma Registry used to pull cases
- ISS \geq 15 and meets one or more of the PI indicators
- Cases reviewed for inclusion by State trauma program
- Abstract form sent to coordinator to complete

SE REGIONAL PI - 2010.3


North Dakota Century Code 23-01

Chapter 23.01.2

A trauma quality improvement program to monitor the performance of the trauma system.

The proceedings and records of the program are not subject to subpoena or discovery or introduction into evidence in any civil action arising out of any matter that is the subject of consideration by the program.

***** If your facility had any trauma deaths in 2010 quarter 3 please be sure to bring those to the meeting for review**

Hospital Name	ISS	Trauma Code activated when met criteria (Y/N)	Pneumo/Hemo Thorax identified and chest tube inserted (Y/N)	GCS \leq 8 and definitive airway established (Y/N)	Transfer time \leq 2 hours to tertiary trauma center (Y/N)	Trauma Team Leader response within 20 minutes (Y/N)	EMS scene time \leq 20 minutes (Y/N)
	17	Y	NA	NA	N	Y	NA
	17	NA	NA	NA	N	Y	Y
	33	NA	NA	NA	N	Y	NA
	21	Y	NA	Y	Y	Y	N (30 MIN)
	18	Y	N	NA	N	Y	N (54 MIN)
	29	N	NA	NA	Y	N	NA
	29	Y	NA	Y	Y	Y	Y
	17	Y	NA	NA	Y	Y	Y
	26	NA	NA	NA	Y	Y	Y

Regional Trauma PI Abstract Form

page 1



WESTAC

Regional Trauma Performance Improvement Abstract Form

Hospital Name/EMS Agency: _____

Patient Gender: _____ Patient Age: _____

Mechanism of Injury (Please be specific): _____

Mode of transport to (your) facility: ____ALS Ground ____BLS Ground ____Air ____POV ____Other

Was a Trauma Code activated? ____Yes ____NO ____NA

Who activated the trauma code? ____EMS ____Hospital Staff

Did the patient meet trauma code activation criteria? ____Yes ____No

Team Leader Response Time: _____

Pre-hospital Vital Signs:

Temp: _____

BP: _____

Pulse: _____

Resp: _____

GCS: _____

O2Sat: _____

Initial ED Vital Signs:

Temp: _____

BP: _____

Pulse: _____

Resp: _____

GCS: _____

O2Sat: _____

Additional Vital Signs:

Temp: _____

BP: _____

Pulse: _____

Resp: _____

GCS: _____

O2Sat: _____

Comments on Vital Signs: _____

TRAUMA ASSESSMENT:

Airway: _____

Regional Trauma PI Abstract Form

Page 2

Breathing: _____

Circulation: _____

Disability: _____

Expose: _____

Injuries Identified: _____

Procedures completed in the ED (hospital) or in the field (EMS Agency) (i.e. O2 therapy, IV, intubation, chest tube, radiographs, CT scans, etc.) Please include diagnostic results.

Patient Death in ED

Did this patient die at your facility? _____ Yes _____ No

If this patient died at your facility please answer the next two questions. If this patient did not die at your facility go to Discharge Disposition questions below.

Was the coroner notified? _____ Yes _____ No

If no, please explain: _____

Was an autopsy done? _____ Yes _____ No

Regional Trauma PI Abstract Form

Page 3

Discharged Home From ED

If this patient was discharged home from the ED, please answer the next two questions. If this patient was not discharged home, go to "Discharged to Another Facility", or "Admitted To Your Facility".

Was this patient discharged home from the ED? ____ Yes ____ No

Mode of transport: ____ALS Ground ____BLS Ground ____Air ____POV ____Other

Discharge to Another Facility

Was this patient transferred to another facility? ____ Yes ____ No

If this patient was transferred to another facility, please answer the next three questions.

Name of facility patient was transferred to: _____

Mode of Transport: ____ALS Ground ____BLS Ground ____Air ____POV ____Other

Length of stay in your ED: _____

Admitted To Your Facility

Please list surgical or other procedures done while patient was admitted to your facility.

Length of stay at your facility: _____

Discharge Disposition: _____

Mode of transport: ____ALS Ground ____BLS Ground ____Air ____POV ____Other

Performance Improvement

Was this patient reviewed through your internal performance improvement process? ____ Yes ____ No

If this did go through your PI process what actions were taken for indicators that fell out/or that were identified? _____

RTAC Meetings or

- Quarterly
- Use tele-medicine / in person meeting / WebEx
- Participants
 - EMS and facility representatives
 - eEmergency
 - Flight service transporting
 - State EMS & trauma programs

Regional Performance Improvement

- Short summary of abstracts provided before meeting “confidential stamped”
- Closed after short general meeting
- Confidentiality forms signed
- Quick “orientation” to PI meeting
- RTC Trauma Medical Director takes the lead
 - Educational component
- Trauma coordinator presents cases at the regional meeting
- Regional Trauma Centers aware of cases, present follow-up/outcomes/PI

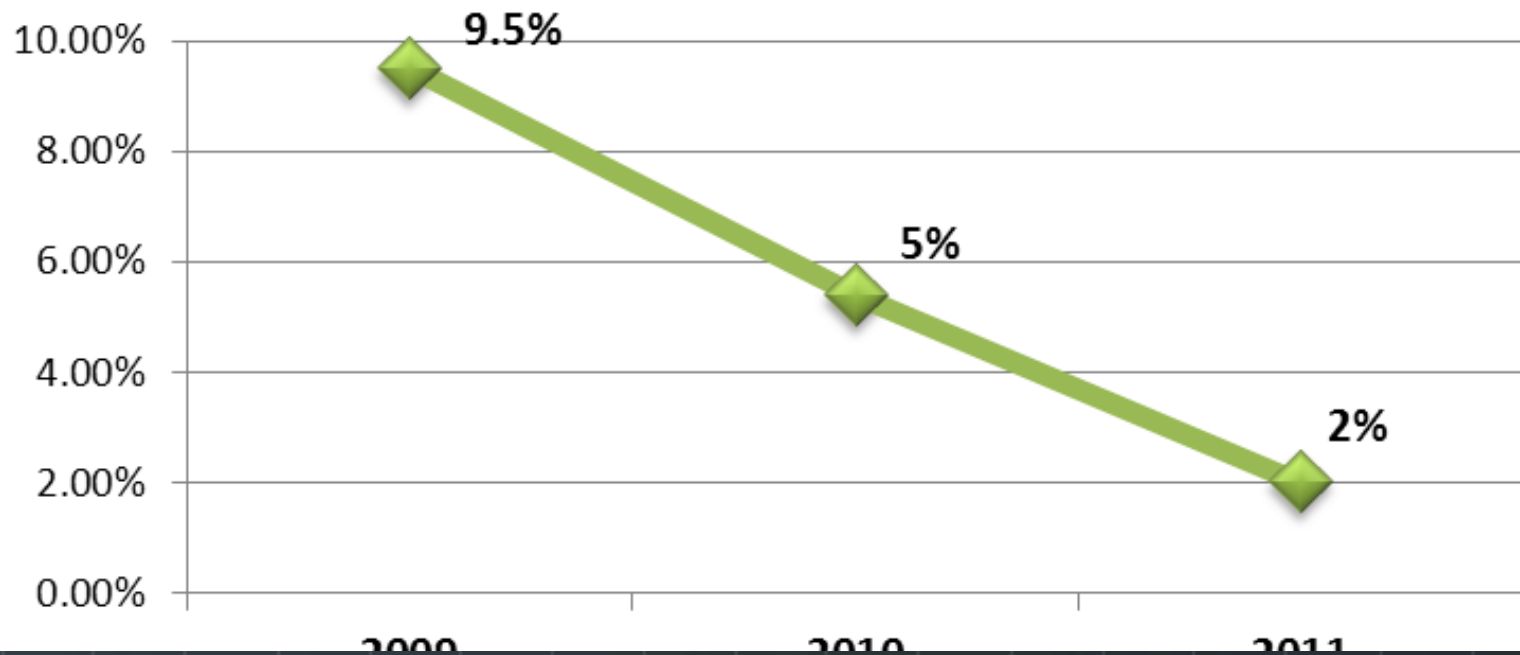
Regional Performance Improvement

- 🌐 Feedback from group
- 🌐 Collect abstract summary
- 🌐 Minutes are created
- 🌐 Recommendations and/or education is provided at the meeting along with
- 🌐 Written letter (when necessary) to the individual facility &/or EMS agency
- 🌐 Regional Chair provides regional updates/issues to the State Trauma Care Committee

Regional Trauma PI

Does it Work?

Total % of Trauma Codes Not Activated When Criteria Met



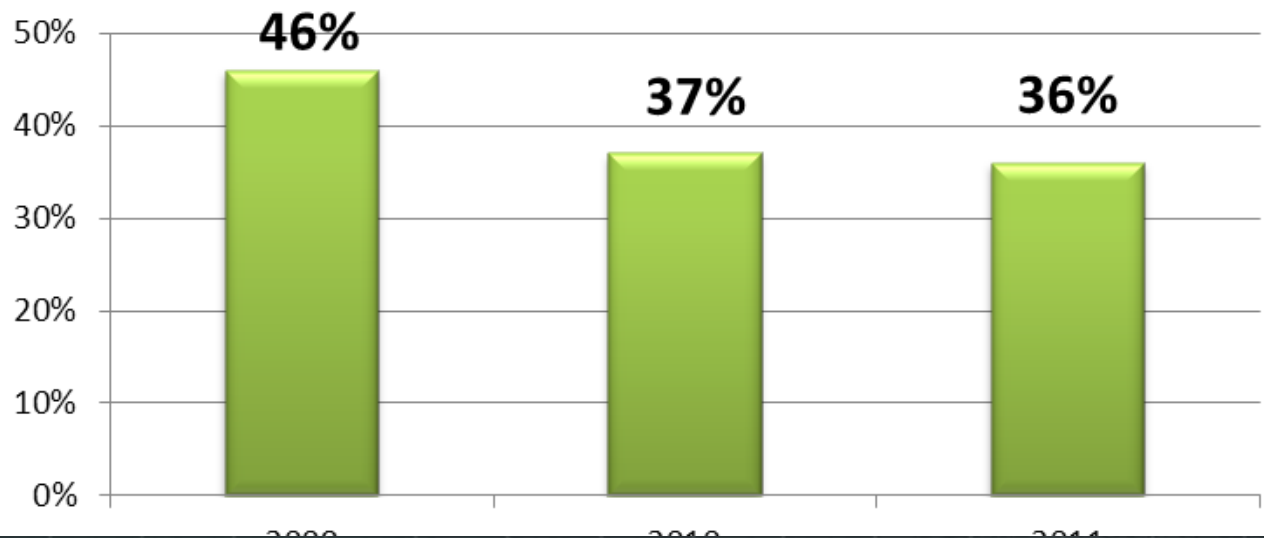
Regional Trauma PI

Does it Work?

- ED time \geq 2 hours for inter-facility transfers
- Looked into reasons for the delay in transfer
- Identified many CTs being done prior to transfer
- CT scan prior to transfer was added to PI indicators

A letter from the State Trauma Committee Chair was sent out to all hospitals regarding CT scans delaying transfers.

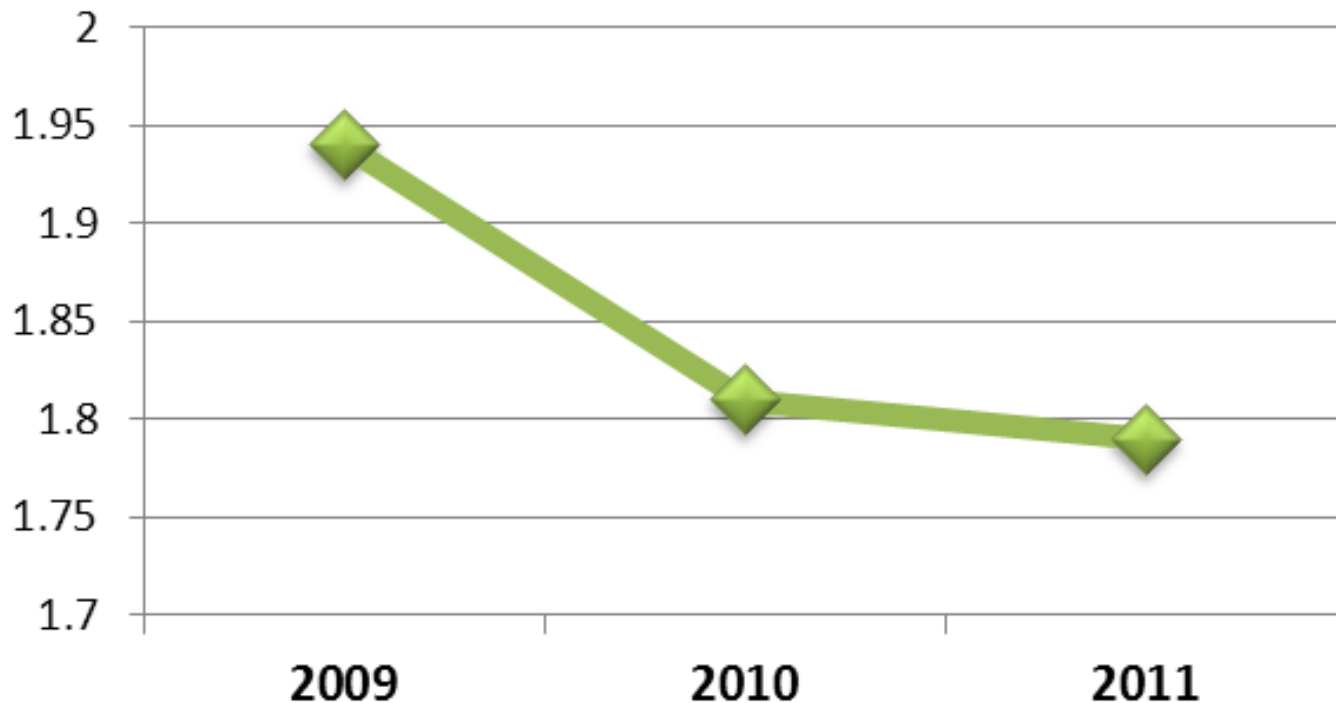
Total Percent of patient receiving CT Scans at Level IV & V Trauma Centers



Regional Trauma PI

Does it Work?

Average ED LOS Until Transfer



Process of Developing Regional Performance Improvement

